

ANNUAL REPORT
OF THE OFFICERS OF
THE NORTH EASTON
VILLAGE DISTRICT
FOR YEAR ENDING
MARCH 31, 1925

ANNUAL REPORT OF NORTH EASTON VILLAGE DISTRICT

OFFICERS FOR THE YEAR ENDING MARCH 31
—1925—

Water Commissioners

JOHN F. LONG	Term Expires 1925
OLIVER AMES	Term Expires 1926
ELLIS G. RANDALL	Term Expires 1927

Moderator

JAMES F. BURKE

Prudential Committee

TIMOTHY J. COTTER	WALFRID J. G. BROMAN
JEREMIAH J. COUGHLIN	

Clerk and Treasurer

RALPH W. CRAIG

Auditors

ARTHUR F. ANDERSON	HELEN E. RANGE
--------------------	----------------

Chief Engineer of Fire Department

DANIEL F. LORDAN

First Assistant Engineer of Fire Department

J. LEON FRENCH

Second Assistant Engineer of Fire Department

WILLIAM BRIDGES

REPORT OF CLERK

North Easton Village District annual meeting held Monday, April 7th, 1924.

Meeting called to order at two o'clock P. M. by Moderator James F. Burke.

Polls opened at 2.00 P. M., and closed at 8.00 P. M.

Total vote cast—465.

Result of ballot for District Officers:

Moderator—

James F. Burke	327 votes
----------------	-----------

Clerk—

Ralph W. Craig	357 votes
----------------	-----------

Treasurer—

Ralph W. Craig	353 votes
----------------	-----------

Prudential Committee—

Walfrid J. G. Broman	275 votes
Timothy J. Cotter	283 votes
Jeremiah J. Coughlin	250 votes
Arthur F. Eastman	229 votes

Water Commissioner for three years—

Ellis G. Randall	383 votes
------------------	-----------

Auditors—

Arthur F. Anderson	350 votes
Helen E. Range	322 votes

Chief Engineer Fire Department—

Daniel F. Lordan	380 votes
------------------	-----------

First Assistant Engineer Fire Department—

J. Leon French	358 votes
----------------	-----------

Second Assistant Engineer Fire Department—

William Bridges	349 votes
-----------------	-----------

Voted to accept reports of District Officers.

Voted to raise and appropriate the following sums of money:

Three thousand seven hundred thirty-five dollars ninety-six cents (\$3,735.96) for Street Lighting.

Two thousand three hundred dollars (\$2,300.00) for care and maintenance of Fire Department.

Nine hundred dollars (\$900.00) for care and maintenance of equipment. Fourteen hundred dollars (\$1,400.00) for salaries. The salary of each engineer to be one hundred dollars (\$100.00) and each member Fifty dollars (\$50.00) yearly.

Fourteen hundred dollars (\$1,400.00) for Miscellaneous Expenses.

Eight hundred dollars (\$800.00) for Removal of Snow.

Two thousand four hundred dollars (\$2,400.00) for the purpose of employing two (2) Police Officers and Watchman for ensuing year.

Two thousand dollars (\$2,000.00) for building and repairing sidewalks.

Voted to appropriate.

Two thousand dollars (\$2,000.00) for building and repairing Sidewalks.

Thirty-six dollars (\$36.00): To install two (2) additional street lights on Canton Street; One near the residence of Thomas P. Bradley, and the other at the bend of the road commonly known as the Kelley House site.

Voted to authorize the District Treasurer, with the approval of the Prudential Committee, to borrow money in anticipation of the revenue of the ensuing year, and issue note or notes of the District therefor.

Voted that Prudential Committee be authorized to make a five (5) year contract with the Edison Electric Illuminating Company.

Voted that proceedings in regard to making the North Easton Fire Department a town institution be dismissed. Selectmen, Prudential Committee and Fire Engineers all opposed.

Voted that in future Water Commissioners be requested to make an itemized report, showing salaries, disposition of bonds, cost of coal and other accessories so that report can be more fully understood.

Voted to adjourn.

Officials sworn by James F. Burke.

Raised and Appropriated		Appropriated
Street Lighting	\$3,735.96	\$36.00
Fire Department	2,300.00	
Miscellaneous Expenses	1,400.00	
Removing Snow	800.00	
Police	2,400.00	
Sidewalks	2,000.00	2,000.00

R. W. CRAIG,
District Clerk.

REPORT OF PRUDENTIAL COMMITTEE

To the Citizens of the North Easton Village District:

We submit the following report for the year ending March 31, 1925:

SIDEWALKS

Raised and appropriated	\$2,000.00	
Appropriated	2,000.00	
Expended	2,823.18	
Unexpended	1,176.82	
Paid John F. Carlson— Building cement walk on Holmes Street	\$255.00	
		\$255.00
Bids were received for building cement walk—255 running feet and 5½ feet wide on Holmes Street: John F. Carlson, \$2.00 running yard.		
Paid John F. Carlson— Extra work on Holmes Street, rais- ing curbing, labor and material	\$25.00	
		\$25.00
Paid John F. Carlson— Work on North Main Street: 4 hours labor @ 75c 3 yards of sand	\$3.00 6.00	
		\$9.00
Paid John F. Carlson— Building cement walk and curbing on Bridge Street	\$350.00	
		\$350.00
Bids were received for building cement walk and curbing—217 running feet 6 feet wide, including curbing, on Bridge Street: John F. Carlson—\$5.00 running yards.		
Paid John F. Carlson— Extra work on Bridge Street: 22 yards cement walk @ \$2.00 yard	\$44.00	
		\$44.00
Paid A. B. Anderson— Cutting 2 driveways on Williams Street, 1 on Center and 1 on Lin- coln Street	\$16.00	
		\$16.00

Paid John F. Carlson— Building cement sidewalk and curb- ing on Center Street	\$700.00	
Bids were received for building cement walk and curbing—420 running feet 6 feet wide, including curb- ing, on Center Street:		\$700.00
John F. Carlson—\$5.00 running yard.		
Paid John F. Carlson— Building cement walk and curbing on Day Street	\$576.68	
Bids were received for building cement walk and curbing—346 running feet, 6 feet wide, including curb- ing, on Day Street:		\$576.68
John F. Carlson—\$5.00 running yard.		
Paid John F. Carlson— Building cement walk and curbing on Seaver Street	\$150.00	
Bids were received for building cement walk and curbing—90 running feet, 6 feet wide, including curb- ing, on Seaver Street:		\$150.00
John F. Carlson—\$5.00 running yard.		
Paid John F. Carlson— Building cement walk on Sullivan Ave.	\$300.00	
Bids were received for building cement walk—240 running feet, 6 feet wide, on Sullivan Ave.:		\$300.00
John F. Carlson—\$3.75 running yard.		
Paid John F. Carlson— Resetting curbing on Sullivan Ave.:		
18 hours labor @ \$1.00	\$18.00	
Fixing driveway on Sheriden and Lincoln Streets:		
4 hours labor @ \$1.25	5.00	
Team, 2 hours @ \$1.00	2.00	
2 bags cement at 90c	1.80	
Paid John F. Carlson— Building 3 driveways on Main Street:		\$26.80
33 hours labor @ 85c	\$28.05	
16 hours labor @ \$1.00	16.00	
25 hours labor @ \$1.25	31.25	
12 hours labor @ 60c	7.80	
Team 12 hours @ \$1.00	12.00	

23 bags cement @ 55c	26.60	
2 truck loads sand @ \$5.00	10.00	
		\$131.70
Paid John F. Carlson—		
Building 2 driveways on Jenny Lind		
Street and 1 driveway on Elm		
Street:		
30 hours labor @ 85c	\$25.50	
22 hours labor @ \$1.25	27.50	
16 hours labor @ \$1.00	16.00	
Team 16 hours @ \$1.00	16.00	
18 bags cement @ 95c	17.10	
2 truck loads sand @ \$5.00	10.00	
		\$112.10
Paid John F. Carlson—		
Building 3 driveways on Lincoln Street:		
13 1/4 hours labor @ 80c	\$10.80	
25 hours labor @ \$1.25	31.25	
31 hours labor @ \$1.00	31.00	
10 3/4 hours labor @ 40c	4.30	
29 bags cement @ 95c	27.55	
Team 12 hours @ \$1.00	12.00	
2 truck loads sand @ \$5.00	10.00	
		\$126.90
Expended		
		\$2,823.18

SNOW ACCOUNT

Raised and appropriated	\$800.00
Expended	374.52
Unexpended	\$425.48

POLICE AND WATCHMEN

Raised and appropriated	\$2,400.00
Expended	2,400.00
Paid Thomas F. Downey	\$1,200.00
Paid Edward J. Healey	1,200.00

STREET LIGHTING

Raised and appropriated	\$3,735.96
Appropriated	36.00
Expended	\$3,685.36
Unexpended	\$86.60

Paid Edison Electric Illuminating Co.:
 175— 60 Cp. Incand. @ \$1.50 a month
 11—250 Cp. Incand. @ \$3.333 a month
 4—400 Cp. Incand. @ \$4,1666 a month

\$3,685.36

MISCELLANEOUS EXPENSES

Raised and appropriated	\$1,400.00
Expended	1,414.95
Exceeded	\$14.95

Miscellaneous Expenses Itemized

District Officers' Salaries:		
Ralph W. Craig, Clerk	\$20.00	
Ralph W. Craig, Treasurer	50.00	
Walfrid J. G. Broman, Prudential Committee	50.00	
Jeremiah J. Coughlin, Prudential Committee	50.00	
Timothy J. Cotter, Prudential Committee	50.00	
James F. Burke, Moderator	25.00	
Arthur F. Anderson, Auditor	10.00	
Helen E. Range, Auditor	10.00	
		\$265.00

Election Officers:	
Cornelius Harvey	\$4.00
Augustus E. Canegaly	4.00
August Ledin	4.00
Charles E. Johnson	4.00
Mary Sweeney	4.00
Marion D. Osborne	4.00
John Cotter	4.00
Carl A. Benson	4.00
Edward J. Healey	4.00
Patrick J. O'Neil	4.00
	3.00

\$39.00

Expenses:

Gardner Job Print—	
Gardner Job Print—	
Meeting Notices	\$7.50
Annual Reports	102.50
Tally Sheets	7.00
Ballots	13.00
Specimen Ballots	3.00
	\$133.00

Sigfrid W. Ledin (Treasurer's Bond)	\$25.00	\$25.00
Distributing Reports	5.00	5.00
Posting Warrants	2.00	2.00
Treasurer's Expenses	2.00	2.00
T. D. Waddell (2 notes)	4.00	4.00
Lighting Bandstand	2.63	2.63
Albert E. Wood (Collector of Taxes)	5.31	5.31
Fred Hanlon (Collector of Taxes)	4.27	4.27
Harry R. Franklin (Collector of Taxes)	97.60	97.60

FIRE STATION

Edison Co. (lighting)	\$43.21	\$43.21
New England Tel. Co. (telephone)	27.65	27.65
Daniel P. Jordan (janitor service)	33.33	33.33
Patrick Ragan (janitor service)	41.67	41.67
Charles Olson (janitor service)	31.25	31.25
J. F. Bradley (T. Paper)	.50	.50
O'Connor's News Store:		
1 case T. Paper and Holder	13.75	13.75
John J. McCarthy:		
18½ tons of coal @ \$17.00	\$314.50	
Discount	4.50	310.00
H. C. Anderson:		
Repair Indesec N. P. bath cock	5.00	
Labor	1.00	6.00
E. E. Keller:		
2 washers @ 10c	\$.20	
Sari Flush	.29	
Pondilla	.25	
Map Wringer	3.98	
Map Handle	.35	
Map	.60	
Map	.55	
		\$6.32
E. E. Keller:		
Repair on Heater, set bars (Hub Heater):		
226 lbs. @ .25c	\$56.50	
2 1/2 inch belts @ 11c	.14	
1 candle	.15	
Labor	5.81	
1 inch of waste pipe	.15	
15 lb. of waste pipe @ 25c	3.75	
Labor	.80	
		\$67.0
A. J. and Tool Co. store:		
Bar	\$1.75	
Brush	3.50	
Duster	2.50	
		\$7.75

F. A. Conant:		
1 cord mixed wood, sawed and delivered into building	\$13.00	\$13.00
William N. Howard:		
2 Insurance Policies on Fire Station for 3 years at \$3,000.00 each @ \$63.75	\$127.50	\$127.50
H. C. Anderson:		
Repair on Heater:		
3/4 M. Std. fusible plug	\$1.00	
1/2 Gal. boiler liquid	10.00	
6 lbs. Asbestos cement @ .06c	.36	
3 hours labor @ \$1.00	\$3.00	
McCarthy Coal Co.:		\$14.36
5 ton coal @ \$17.25	\$86.25	
		\$86.25
Expended		\$1,414.95

APPROPRIATIONS

Street Lighting	\$3,771.96	
Police and Watchmen	2,400.00	
Sidewalks	4,000.00	
Miscellaneous Expenses	1,400.00	
Fire Department	2,300.00	
Removing Snow	800.00	
		\$14,671.96

EXPENDITURES

Street Lighting	\$3,685.36	
Police and Watchmen	2,400.00	
Sidewalks	2,823.18	
Miscellaneous Expenses	1,414.95	
Fire Department	2,253.72	
Removing Snow	374.52	
		\$12,951.73

UNEXPENDED

Unexpended		
Street Lighting		\$1,720.23
Sidewalks	\$86.60	
Removing Snow	1,176.82	
Fire Department	426.48	
	46.23	
		\$1,735.18

EXCEEDED

Miscellaneous Expenses	14.95	\$14.95
Unexpended balance		\$1,720.23

In District report for year ending March 31, 1924, our cash on hand showed as \$2,386.36 whereas \$1,486.54 of this money belonged to the South Easton-Eastondale District. This error in Assessors' list was not discovered until after our District meeting. Therefore on July 16 this amount \$1,486.54 was returned to the Town of Easton Tax Collector, making it impossible to carry out vote on sidewalk appropriation of \$4,000.00.

Paid Town of Easton Tax Collector	\$1,486.54
Balance	\$233.69

WALFRID J. G. BROMAN,
TIMOTHY J. COTTER,
JEREMIAH J. COUGHLIN,
Prudential Committee.

REPORT OF WATER COMMISSIONERS

To the Citizens of North Easton Village District:

We submit the following report for the year ending February 28, 1925.

STATEMENT

Cash on hand Mar. 1, 1924	\$4,403.65	
Received from Meter Service	10,943.81	
Received from Sale of Meters and Merchandise	191.52	
Received from Repairs	142.56	
Received from Interest on Deposits	27.31	
Received from W. F. & C. N. District Account	203.32	
		\$15,912.17
Paid for Operating Ex- penses	\$4,259.39	
Paid for Meters and Mdse	369.83	
Paid for Repairs	1,572.24	
Paid for Interest on Bonds	2,115.00	
Paid for Bonds matured Aug. 1, 1924	2,000.00	
Cash on hand Mar. 1, 1925	5,595.71	
		\$15,912.17

OPERATING EXPENSE ACCOUNT

Received from Meter Service		\$10,943.81
Paid H. W. Jones, engineer	\$1,820.00	
Paid Wm. J. O'Connell, en- gineer	50.00	
Paid Grace E. Wood, clerk	500.00	
Paid John Stanton, reading meters	90.00	
Paid L. J. Crockett, reading meters	50.00	
Paid N. E. Tel. & Tel. Co.	62.30	
Paid E. E. Ill. Co.	10.12	
Paid C. E. Iron Oil Co.	21.02	
Paid Alice K. Briggs, envel- opes and postage	51.16	
Paid J. M. Schaeffer & Bollen- baker, Cops. & readings Gardner & Co.	1.16	
Paid Hartford Steam Boiler Inspection & Insurance		

Company, insurance	85.90	
Paid Ames Shovel & Tool Co., store supplies	10.51	
Paid Henning Hanson, labor at pumping station	20.00	
Paid N. Y., N. H. & H. R. R. Co., freight charges on coal and mdse.	221.32	
Paid Anderson's Express	.65	
Paid Benjamin A. Buzzell & Co., 175,200 lbs. coal	430.16	
Paid E. E. Kelley, lantern, oiler and nozzle	3.94	
Paid Treworzy Pen & Ink Mfg. Co.	1.75	
Paid O'Connor's News Stand, record book and ink	1.95	
Paid John J. McCarthy Co., carting coal and mdse.	184.07	
Paid Gardner Job Print, printing	25.60	
Paid Gardner A. Wilbur, labor and material used on electric lights at pump- ing station	4.15	
Paid Con. Dailey, labor on re- newals and new connections	80.50	
Paid Am. Railway Express	1.70	
Paid Buffalo Meter Co., meter record books	30.60	
Paid E. Russell Morton, 107,440 lbs. coal	254.21	
Paid James F. Burke, legal services	1.00	
Paid Eastern Coal Co., 83,600 lbs. coal	205.27	
Paid Walworth Mfg. Co., supplies	13.60	
Paid John Anderson, labor	4.00	
Paid Sundries	10.25	
		\$4,259.39

REPAIRS

Paid E. E. Kelley, renewing pipe at pumping station	\$51.75
Paid Geo. H. DeWitt & Son, labor at pumping station	5.20
Paid Con. Dailey, repairs on leaks, broken hydrants, service boxes and at pumping station	471.26

Paid Ames Shovel & Tool Co., repairs by machinist	32.29	
Paid John J. McCarthy Co., carting	1.00	
Paid Ludlow Valve Mfg. Co., hydrants	206.98	
Paid Hodge Boiler Works, retubing boiler	419.00	
Paid F. H. White, labor at pumping station	19.75	
Paid Ames Shovel & Tool Co. Store, paint, oil and supplies	59.26	
Paid Green, Tweed & Co., re- pairing lubricator	1.25	
Paid Warren Steam Pump Co., piston rod, valves, guards and springs	52.37	
Paid Walworth Mfg. Co., valve box tops	13.05	
Paid Worthington Pump and Machinery Corp., repairs on Worthington pump	70.59	
Paid L. Richmond & Co., lights of glass for pumping station	8.49	
Paid John F. Long, painting pumping station and hydrants	160.00	
	<u>\$1,572.24</u>	
Less received from repairs	142.56	
	<u>\$1,429.68</u>	

INTEREST

Paid Interest on Bonds	\$2,115.00		
Less received from Interest on Deposit	27.31	\$2,087.69	\$7,776.76
Excess of receipts over expenditures		<u>\$3,167.05</u>	

MERCHANDISE ACCOUNT

Paid National Meter Co., meters	\$176.10
Paid Sumner & Dunbar, sup- plies	51.76
Paid Lead Lined Iron Pipe Co., pipe and fittings	121.63
Paid Walworth Mfg. Co., sup-	

plies	20.34	
	<u>\$369.83</u>	
Less received for meters and mdse	191.52	
	<u></u>	\$178.31

Earnings	\$11,508.52	
Expenses	6,201.46	
	<u></u>	
Balance Profit		\$5,307.06
Less Bonds	\$2,000.00	
Interest on Bonds	2,115.00	\$4,115.00
	<u></u>	
Net profit for year		\$1,192.06

FINANCIAL CONDITION

Original Plant	\$75,414.57	
Extensions	23,429.36	
Reservoir	12,915.66	
Merchandise	5,152.58	
Accounts Receivable	1,560.21	
Cash	5,595.71	
	<u></u>	\$124,068.09

Bonds Due	\$46,000.00
Bonds payable to Old Colony Trust Co.	
Bonds payable \$2,000.00 Aug. 1, each year.	

OLIVER AMES,
JOHN F. LONG,
ELLIS G. RANDALL,

Water Commissioners.

We have examined the accounts of the Water Commissioners and found the same correct.

ARTHUR E. ANDERSON,
HELEN E. RANGE,
Auditors.

In submitting the above report the Water Commissioners regret to state that Mrs. Grace E. Wood, clerk of the Water Board since 1909, has resigned and they wish to record their grateful appreciation of her very valuable services.

The auxiliary service from the reservoir was added in 1918 on the recommendation of Mr. Percy M. Blake of Newtonville, the engineer who planned and installed the original system. This cost \$1,757.76. We might add that during the severe drought of last year, without this extra supply the well would not have been able to supply the needs of the District and Unionville.

We submit the following pumping statement for the past five years which includes the water taken by Unionville during that time. There are at the present time 680 watertakers in North Easton Village District.

Year	Gallons Pumped	Daily Average
1920	52,536,650	143,936
1921	49,410,680	135,371
1922	59,049,710	161,780
1923	56,998,310	156,159
1924	57,692,820	158,062

Of which Unionville used:

1920	2,660,485	7,289
1921	3,085,819	8,454
1922	3,521,304	9,648
1923	3,744,790	10,259
1924	4,362,866	11,953

A new and larger pump was installed in 1917 at a cost of \$1,566 in place of one of the original pumps in service since 1887. The remaining old pump is now about worn out and very expensive to operate and is in danger of breaking down at any time.

In view of this fact, and after consultation with Mr. Percy M. Blake, your commissioners have been advised to replace this pump with an electric pump which will automatically keep the stand pipe full and maintain the maximum pressure at all times, both day and night, thereby being a great protection in case of fire.

We are also informed that this electric pump is much more economical to run than a steam pump and the surrounding towns are putting them in and they have given perfect service.

Of course the large steam pump will be kept in condition and ready to use at any time in case of a temporary breakdown.

This electric pump will cost in the neighborhood of \$6,000 to install, therefore your commissioners ask an appropriation of \$3,000 for this purpose.

Herewith is appended a copy of the letter received by the Water Commissioners, relative to present conditions, and recommendations:

Acting on your request, I have investigated the condition of the water service as maintained by and for the District, and now herein submit the facts disclosed and recommendations for needed improvements.

On Tuesday, March 10, I examined the pumping plant and the sources of supply. It appears.

1. That the quantity and quality of water available from the main and reinforcing wells are ample and satisfactory for all the use of the population now supplied, with a margin of at least 30% to be depended on for an equal increase in the consumption.

2. The present pumping plant can deliver into the standpipe all the water obtainable from the sources, if run continuously at speeds varying with the yield of the sources.

3. The present practice, as shown on the daily record charts, appears to be regulated somewhat by the habit or convenience of the pumping engineer; as, for instances, on March 7 and March 8, pumping was begun at 9:15 A. M., while the water in the standpipe at 7 A. M., 2 hours earlier, was 32 feet below high water mark, (loss in quantity of water 75,000 gallons), and dropped a further distance of 9 feet, (further loss in water 24,000 gallons), before pumping began. At the time when pumping began, the loss of water in the standpipe amounted to very nearly 100,000 gallons, or 42% of its total storage capacity of 235,000 gallons. This total storage lies between the high water pressure of 62 1/2 pounds, and the bottom of the standpipe pressure of 40 pounds; the loss in storage is the mean lower may be obtained by multiplying the loss

in pounds pressure below 62 1-2 pounds by 5400 gallons. It should be understood that the 62 1-2 pounds represents the static pressure from high water mark when the standpipe is full and the pumps are not running.

From the charts it appears that for 18 1-8 hours between the stopping of pumping at 3:10 P. M. on March 7 and the starting of pumping at 9:18 on March 8, the loss of water in the standpipe was nearly 98,000 gallons, a rate per hour averaging 5400 gallons with hourly drop in the standpipe of nearly 2 3-10 feet. It is obvious that so long a non-pumping period imposes on the village an unwarranted risk in danger of loss by fire.

To maintain a reasonably efficient fire service on all the hydrants, the range of pressure of the water should lie between 62 pounds maximum pressure and 58 pounds minimum pressure, a difference of 4 pounds equivalent to a depth of water of 9 feet, and a volume of 21,150 gallons.

Further information as to the service maintained is interesting. In the dry period of last year on July 30, pumping was started at 8:50 A. M., with the pressure standing at 37 pounds. Pumping was continued until 11:20 A. M., and a pressure of stored water was 45 pounds. Pumping was resumed at 2:10 P. M., the pressure having fallen from 45 to 40 pounds, and stopped at 4:40 P. M., with the static pressure of 56 pounds. The total pumpage for whole 24 hours was 224,140 gallons.

On July 31, the pumping was intermittent, starting at 7:50 A. M., with a static pressure of 32 pounds, stopping at 8:05 A. M., starting again at 8:30 A. M., with a static pressure of 32 pounds, stopping at 11:05 A. M., static pressure 45 pounds; started at 1:40 P. M., static pressure having fallen to 40 pounds, pumping stopped at 2 P. M., static pressure 41 pounds; started at 2:50 P. M. static pressure 39 pounds, stopped at 3:50 P. M., static pressure 45 pounds; started at 4:10 P. M., static pressure 44 pounds, stopped at 5:15 P. M., static pressure of water then standing in standpipe 50 pounds. The aggregate pumping covered 5 hours and 17 minutes, the quantity pumped was 248,940 gallons. It will be noticed that at no time on these 2 days, when the last stop in pumping was made, that the static pressure exceeded 50 pounds, while in the morning of July 31, this pressure dropped as low as 32 pounds, or so low that the hydrant service throughout the whole territory would have been of little or no value had an outbreak of fire occurred.

From the report of your commission for the year ending March 31, 1921 (later figures not being available), it appears that the in-

vestment in the plant at that time was \$111,759.59 (page 12), and the annual strictly operating expense (page 11), was \$4753.29. It appears on the same page that the straight earnings from the sale of water and service for that same year amounted to \$10,184.75. If "accounts receivable" (\$2033.22), are added, these earnings would be \$12,217.97.

The works were first put in commission in 1888; for the next few following years the practice was to continue the pumping until about 6 P. M., so that the standpipe might be entirely full at that hour; and to begin pumping not later than 7 A. M., and maintain it at a rate varying during the day as the consumption increased or lessened, with the exception of a reasonable noon recess for the engineer.

From the report on the construction of the works made by me to the Board of Water Commissioners on March 21, 1888, the following levels are taken:

High water in the standpipe	0
Surface of meadow at main well	154 feet below
Top of the stone capping of the well curb	153 feet below
Bottom of the well	180 feet below
Bottom of the suction pipe in the well	178 feet below
Threshold of engine room, pumping station	150 feet below
Centre of pressure gauge in engine room	143.5 feet below

The first test of the yielding capacity of the well, as made on March 14, 1888, gave the following results: yield of the well in 7 hours' continuous pumping, 214,000 gallons, the water in the well varying from 10 3-10 feet to 23 5-10 feet below the suction valves of the pumping engine. After pumping 7 hours, there was left a depth of water in the well of 10 3-10 feet, and during the last hour the water in the well was lowered only eight-tenths of a foot, and during the hour there was pumped from the well about 30,000 gallons of water. The conclusion from this test was that the inflow into the well when the water therein stood at a height of 10 3-10 from the bottom and 8 3-10 feet above the bottom of the suction Pipe in the well, was not less than 26,500 gallons per hour. Had the test continued, the lowering of the water surface in the well at the same rate, would have been for 2 hours, about 18 inches, leaving then a depth over the suction pipe of 6 1-2 feet.

This capacity yield of water was measured in the wet season: the report of 1888 estimated the capacity of the works to be sufficient to supply a population of 5,000 people under pumping condi-

tions so arranged as to draw the water at a practically continuous rate steadily through the 10 or 12 hours of the 24 hours of the day.

During the test of the water from which the above quotations were made, the average lift above the suction valves of the pump, including friction in the pipe, during the test was 149 1-2 feet with the water in the well varying from 10 3-10 feet below the pump when pumping was begun, to 23 5-10 feet (a drop of 13 2-10), when the pumping was stopped.

A few years ago, the capacity of this well was increased by the direct injection of water from the adjacent reservoir down into the gravel strata west of the well.

All of the above facts are stated as a necessary background for the findings and recommendations which I submit herein.

It is obvious that to maintain the maximum of efficiency in service and water pressure that the present practice of pumping for brief periods between 8 A. M. and 5 P. M., must be abandoned and the pumps run, with the exception of a noon hour, practically all the time, slowing up as the water approaches high water mark, and speeding up as the water begins to fall. You will recall that the standpipe contains in its interior a rising pipe which terminates and discharges 10 feet below high water mark, and when in pumping water, the pressure gauge shows that the standpipe has been filled up to the top of this rising pipe, there is indicated a margin of 10 feet above (1.34 pounds), to be added to the pressure indicating that the overflowing of the top of the rising pipe. The standpipe being of small diameter (20 feet, 250 gallons per vertical foot), makes the supplying and maintaining of the water a very flexible process difficult to apply without continuous attention to the pumping, especially the volume being pumped in any one hour.

One of the principal functions of this water supply is to adequately protect the city from destruction by fire, and the furnishing of a constant water pressure is nearly a full water pressure as now furnished. It is obvious that a more modern and flexible method of supplying the water should be provided to supersede the present method of pumping and the water should be constantly maintained, much as is now done with electricity. That such improvement can be made is proved in the experience of those communities which have substituted electric power for steam operation in water works.

We consider an annual operating cost of \$100,000 for electricity, including fuel, oil, repairs on pumps and motors, and the cost of maintenance incident thereto, as a total of \$25,000 per year. It is

apparent that by using the electric current in pumping, this amount may be very materially reduced and a service provided which will be dependable, automatic, suffering little from depreciation, requiring very little attention on the part of the superintendent of the works and costing very little to keep in order.

The subject of this change in power I have carefully considered, and offer the following suggestions which I believe merit the approval of your Board.

It is assumed that a daily consumption of 300,000 gallons must be met with a margin in over supply of 60,000 gallons, the two making the total of 360,000 gallons available to be drawn from the well, raised, and maintained at the elevation of high water mark in the standpipe, during the 24 hours. It is assumed that a maximum hourly consumption for a brief period may be at the rate of 40,000 gallons, equivalent to 667 gallons per minute. To maintain the water level in the standpipe at a height not less than 80 feet from the bottom (or 20 feet down from high water mark), a pumping capacity of 400 gallons per minute would leave a rate of deficiency of 267 gallons per minute, the draft of which would lower the water in the standpipe 1 foot in about 9 minutes and about 10 feet in 88 minutes. Thus, for nearly an hour and a half there would be a supply available for fire protection of 58,000 gallons, equal to 3 fire streams of 220 gallons each drawn from hydrants for the 88 minutes, thrown under pressure of water in the standpipe at elevation of 10 feet below high water mark:—height of a hydrant stream at the railroad crossing on Elm Street, under these conditions, would be 85 feet vertically.

Compare with this service the service which would have been available for use of the fire department at 6 A. M. on the morning of July 31) pumping was started at 7.50 A. M.), with a hydrant pressure 30 pounds below the pressure from a full standpipe; similar conditions, averaging in deficiency a loss of from 15 to 25 pounds in water pressure at the hydrants, have existed a greater part of the time in recent years. The promptness of your fire department in responding to such alarms as have been received, together with the consideration of a kind Providence have protected the District from this lack of service.

The following suggestions for remedying the conditions above are submitted for the consideration of your Board.

I. As the primary feature of the improvement, there should be installed a motor driven pump arranged to draw through a new

suction pipe a supply of water from the well, and force the same to the high water level of the standpipe; this pump to be of the two-stage centrifugal type designed to permit easy examination of its interior, and with a capacity sufficient to lift the water from the lowest level in the well under which such type of pump can operate with safety. The capacity of this pump should be equal to raising through a maximum draft not less than 400 measured gallons of water per minute, and deliver the same at the high water line in the standpipe. With this type of pump it is important to lessen the height of suction as much as the conditions of the source and the location will permit, and I find it is feasible to so place such pump that its shaft will stand at a level not less than 4 feet (and probably 5 feet) below the piston rods of the present steam pumps. An excavation and the construction of a waterproof surrounding chamber will be necessary. The suction pipe required can be laid in the ground to and into the present well without serious difficulty and at reasonable cost. The suction pipe should be provided with an easy and sure acting foot valve with its lower end in the well, and provisions for priming the pump and suction pipe will be a part of the improvement.

2. This pump will be actuated by the placing of a 40 horsepower electric motor with its shaft extending in the line of the pump shaft and connected therewith by a flexible and easily removed and adjustable coupling. These two machines will stand on a common bed plate which will be bolted to an appropriate foundation in the motor power chamber or pit designed to receive it, and the leads into and from the pump will be controlled by closely placed, tight, but easily worked gates, and the force main passing out through the wall of building, in an easy curve, connecting with the present force main leading from the steam plant to the standpipe. On this new pump force main there is to be placed a check valve, closing with the pressure from the standpipe, with a proper by-pass around it.

3. Provisions for and the placing of the pump and motor and connecting pipes can probably be made within the the basement area of the present pumping station; the economy and safety of so locating them, as compared with the location outside the walls of the present pumping station may best be settled by the making of careful, comparative estimates of the two opportunities. Accessibility to the control and sufficient light for the examination of this plant must be taken into account.

3. The best speed for a two-stage pump for the work appears to be, from experience, 1200 revolutions per minute, although much higher speeds are in use for such pumps. That factor will be a proper matter for consideration in connectin with the laying out of the plant under the direction of your Board.

5. The automatic control of this plant, using the latest, approved appliances, may be depended upon with an extremely small factor of uncertainty of action—provided, of course, that the operation of the plant is placed in the hands of a competent and vigilant superintendent. The current for operating the motor may be obtained from the nearby, high tension circuit of the Brockton Edison Company at standard and uniform rates for current supplied,—a contract for which the said Company is willing to enter into,—stringing the wires therefor (3 wire lines), through Lincoln Street and the pumping station approach, placing the last pole near the pumping station, and providing either a current of 2200 volts or reducing that current to 550 volts, as your Board may deem expedient when considering the installing of the proposed plant.

The estimated cost of the pump, with the extended bed plate, and including the cost of attaching the motor thereto, and lining up the two machines (but NOT including the cost of the motor itself), delivered at North Easton, should not exceed \$900. The cost of the motor with instruments and accessories required for the starting, stopping, operation and safe automatic control, delivered at the pumping station, should not exceed \$1700. The cost of placing the controlling instruments and accessories and wiring into and within the pumping station should not exceed \$700. The cost of the water tight pit and foundation for the machinery and placing the latter in permanent position, including all interferences, openings, and attachments in and to the station building, should not exceed \$900. The changes and reconstruction in the pumping station floor, and the facings of the foundation walls around the pit should not exceed \$400.

It is proposed to supply the controlling water pressure for actuating the electric control through a small water pipe to be tapped into the floor of the standpipe within the well containing the support of the rising pipe, and laying this controlling pressure pipe below the frost line under ground to and into the basement of the pumping station and attaching it to the electric controlling mechanism. The motor for priming the pump and its suction pipe may be furnished by connection tapped into and leading from the old force main at a point outside the building, and beyond the present

check valve.

The cost of the new suction pipe (ten inches) in and from the well to the new pump, and the cost of extending the discharge pipe from the new pump, including a check valve thereon, and connecting it with the present force main, should not exceed \$550.

Added together, the above items of cost aggregate \$5150.

The above estimates of cost in the case of machinery and appliances cover first class and the best of its kind in each case. If the plant is to be durable, efficient, and so far as it is possible to make it, "fool proof," probably the prices quoted cannot be very much reduced in the selection and ordering.

As to the annual cost of pumping the water by this new plant, the current for pumping a daily average throughout the year of 240,000 gallons should not exceed \$2,000. The cost of fuel for running the present steam plant I have not obtained, but whatever it may amount to, plus the cost of lubricating the present machinery, disposal of ashes, repairs on boilers and settings—nearly all of which may be saved—may be offset against this new cost of \$2,000. Further, the cost of attendance and care, estimated in the time and attention which it will be required to apply to this new plant, should be not more than one-third of the cost of the full salary of a superintendent competent to manage and care for the whole plant.

REPORT OF FIRE DEPARTMENT

To the Citizens of North Easton Village District:

The Board of Engineers submit the following report of the North Easton Fire Department:

During the year this department has answered 66 alarms for fire, of which 46 were grass and wood fires, 18 building fires, and 2 false alarms.

This year we have made quite an improvement in our fire alarm system, but we have got to do a lot more on account of the trees. We have installed a new fire alarm bell on the station this year, which will pay for itself in about two years, whereby we will make a big saving. We can also take care of the same more conveniently. We have painted the ladder truck this year, which was very badly needed, and put it in first class shape.

The board recommends that the sum of \$2,300.00 be raised and appropriated for the maintenance and care of equipment and salaries, and to take care of the running expense of the Fire Department.

We also submit a report of expenses for the year ending March 31, 1925.

Engineers' and Members' Salaries	\$1,300.00	
M. E. Church, balance on rent for Striker	40.00	
Sears, Roebuck & Co., bell on station	181.51	
McRae & Ouderkirk, raising bell on station	100.00	
J. A. Lindquist, painting ladder truck	200.00	
Topical Paint Co., paint and express	4.46	
Mass. State Firemen's Association	23.00	
Combination Ladder Co., supplies	18.00	
O. Ames Corp'n Store	.90	
Gerard Electric Co., supplies	45.00	
Capen & Lane, supplies	3.00	
Gamewell Fire Alarm Co., supplies	144.60	
McMenamy Dept. Store	43.25	
Daniel Lordan, care of fire alarm	100.00	
Repairs on fire alarm	50.00	
		\$2,253.72
Appropriation		\$2,300.00
Expended		2,253.72
Balance		\$46.28

DANIEL LORDAN,
I. LEON FRENCH,
WILLIAM BRIDGES,

Board of Engineers.

REPORT OF TREASURER

For the year ending March 31, 1925

RECEIPTS

Amount on hand March 31, 1924	\$2,386.36
Loans	6,912.15
Income Tax	2,477.77
Taxes—1924	9,703.88
Taxes—1923	687.44
Taxes—1922	28.24
Taxes—1921	1.08
Taxes—1920	.86
Interest	49.89
Received from Fire Department	17.06
Received from Edison Co.	.45
	\$22,265.18

EXPENDITURES

Police	\$2,400.00
Sidewalks	2,823.18
Lighting	3,685.36
Fire Department	2,253.72
Loans and Discount	7,000.00
Miscellaneous Expenses	1,415.40
Easton Tax Collector	1,486.54
Removing Snow	374.52
	\$21,438.72
Cash on hand March 31, 1925	
	\$826.46

R. W. CRAIG,
District Treasurer.

We hereby certify that we have examined the Treasurer's accounts and found the same to be correct.

A. F. ANDERSON,
HELEN E. RANGE,
Auditors.

REPORT OF DISTRICT TAX COLLECTIONS

Jan. 1 to Dec. 31, 1924

Dr.

Taxes of 1920 uncollected Jan. 1, 1924	\$.86	
Taxes of 1921 uncollected Jan. 1, 1924	1.08	
Taxes of 1922 uncollected Jan. 1, 1924	28.24	
Taxes of 1923 uncollected Jan. 1, 1924	699.98	
Taxes of 1923 assessed in 1924	85.04	
Tax commitment of 1924	10,400.50	
		\$11,215.70

Cr.

Taxes of 1920 collected in 1924	\$.86	
Taxes of 1921 collected in 1924	1.08	
Taxes of 1922 collected in 1924	28.24	
Taxes of 1923 collected in 1924	694.13	
Taxes of 1924 collected in 1924	9,570.05	
		\$10,294.36
Taxes of 1923 abated in 1924	\$90.89	
Taxes of 1924 abated in 1924	39.52	
		\$130.41
Taxes of 1924 uncollected Dec. 31, 1924		\$790.93
		\$11,215.70

Remittances to Ralph Craig, District Treasurer:

Mar. 31, 1924	\$531.02	
April 23, 1924	17.24	
Oct. 1, 1924	145.94	
Nov. 6, 1924	7,000.00	
Dec. 31, 1924	2,591.48	
		\$10,285.68

Refunds on taxes abated after collection:

Taxes of 1923	\$6.69	
Taxes of 1924	1.99	
		\$8.68
		\$10,294.36